As a below named inventor, I hereby declare that:

Combined Declaration and Power of Attorney for Patent Application

Docket Number: 15-4-499.00

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if phural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Spatialized Audio in a Three-Dimensional. Computer-Based Scene, the specification of which is attached hereto unless the following box is checked:

as United States A was amended on	; Application Number or PCT Internation (if applicable)	national Application Number	_; and
I hereby state that I have n as amended by any amenda	eviewed and understand the conte ment referred to above.	ors of the above identified specification, i	including the claims,
I acknowledge the duty to	disclose information that is mater	ial to patentability as defined in 37 C.F.R	₹. § 1.56.
inventor's certificate, or §	365(a) of any PCT International and have also identified below. I	19(a)-(d) or § 365(b) of any foreign application which designated at least one by checking the box, any foreign applicating a filing date before that of the applicating	country other than the ion for patent of
Prior Foreign Application	(8)		Priority Claimed
(Application No.)	(Country)	(Day/Month/Year Filed)	□ Yes □ No
(Application No.)	(Country)	(Day/Month/Year Filed)	□ Yes □ No
I hereby claim the benefit	under 35 U.S.C. § 119(e) of any	United States provisional application(s) li	isted below.
(Application No.)	(Filing Date)		•
(Application No.)	(Filing Date)		
application designating the application is not disclosed application is not disclosed assessment of 35 U.S.C. 8	e United States, listed below and, d in the prior United States or PC 112, I acknowledge the duty to d ame available between the filing of	nited States application(s), or § 365(c) of insofar as the subject matter of each of the Timernational application in the manner isclose information that is material to paradate of the prior application and the nation	provided by the first entability as defined in
(Application No.)	(Filing Date)	(Status - patented, pe	nding, abandoned)
(Application No.)	(Filing Date)	(Status - parented, po	ending, abandoned)

Appl. No. (to be assigned)
Docket No. 15-4-499.00

I hereby appoint the following autorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Christopher Byrne, Esq., Reg. No. 32,204; Irene Hu Fernandez, Esq., Reg. No. 34,625; Steven S. Weiner, Reg. No. 38,330;

Robert G. Sterne, Esq., Reg. No. 28,912; Edward J. Kessler, Esq., Reg. No. 25,688; Jorge A. Goldstein, Esq., Reg. No. 29,021; Samuel L. Fox, Esq., Reg. No. 30,353; David K.S. Cornwell, Esq., Reg. No. 31,944; Robert W. Esmond, Esq., Reg. No. 32,893; Tracy-Gene G. Durkin, Esq., Reg. No. 32,831; Michele A. Cimbala, Esq., Reg. No. 33,851; Michael B. Ray, Esq., Reg. No. 33,997; Robert E. Sokohl, Esq., Reg. No. 36,013; Eric K. Steffe, Esq., Reg. No. 36,688; Andrea G. Reister, Esq., Reg. No. 36,253; and Daniel N. Yannuzzi, Esq., Reg. No. 36,727.

Send Correspondence to:

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Direct Telephone Calls to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. (202) 371-2600

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Pull name of sole or first inventor: Shinys Matsuoka	
First inventor's signature	April-30-1997
Residence	
1885 California Street, #6, Mountain View, California 94041-1732	
Citizenship	
Japan ·	
Post Office Address	
1885 California Street. #6, Mountain View, California 94041-1732	

(Supply similar information and signature for subsequent joint inventors, if any)

PATENTS ONLY

<u>As</u>	sistant Commissioner for Patents: Please record the atta	ached or	iginal document.	
	Name of committee and the N	_		
1.	Name of conveying party(ies):	2.	Name and address of rece	
	PLATINUM technology, inc.		PLATINUM technology IF	
	Additional name(s) attached 2 (7 Vec - 1)		1815 South Meyers Road	
	Additional name(s) attached? ☐ Yes ■ No		Oakbrook Terrace, IL 601	i 81
3.	Nature of conveyance:		Additional names/addresse	es attached? Yes
	■ Assignment		No	
	☐ Merger			
	☐ Security Agreement			
-	☐ Change of Name			
	Other:			
	Execution Date: December 23, 1998			
4.	Application number(s) or patent number(s):			:
	If this document is being filed with a new application, the		• •	IS:
	A. Patent Application No.(s):	B . 1	Patent No.(s):	
	08/640,003		98,761	
	08/748,613	5,8	08,613	
	08/845,858			
	08/901,069			
	08/845,857			
	08/903,440			
	08/716,543			
	08/694,759			
	08/900,471			
	08/841,397			
	Additional numbers a	ittached?	? □ Yes ■ No	
5.	Name/address of party to whom correspondence	6.	Total number of application	ns/patents involved: 12
	concerning document should be mailed:			
		7.	Total fee (37 CFR 3.41): \$	480
	John C. Phillips		■ Enclosed	
	Fish & Richardson P.C.		☐ Authorized to charge de	posit account
	601 Thirteenth Street, N.W.			
	Washington, DC 20005			
		8.	Deposit account number: 0	
			If the fee above is being ch	
			account, a duplicate copy of	
			attached. Please apply an	
			any credits, to our Deposit	Account No. 06-1050.
	DO NOT USE	E THIS S	SPACE	
9.	Statement and signature: To the best of my knowledge	and be	lief, the foregoing information	on is true and correct
	and the attached is the original document.	. 1(/.		
	John C. Phillips, Reg. No. 35,322	J. MI	1. j.	January 6, 1999
	Name of Person Signing Signature		1	Date
	Total number of pages including cove	r sheet,	attachments, and documen	

PATENT ASSIGNMENT

WHEREAS, PLATINUM technology, inc., a corporation of the State of Delaware, having a place of business at 1815 South Meyers Road, Oakbrook Terrace, Illinois 60181 ("ASSIGNOR"), is the owner of the entire right, title and interest in and to certain United States patents and patent applications as well as certain foreign patents and patent applications corresponding thereto, said patents and patent applications being identified in the attached Schedule A and being hereinafter referred to as "PATENTS AND PATENT APPLICATIONS".

WHEREAS, PLATINUM technology IP, inc., a corporation of the State of Delaware, having a place of business at 1815 South Meyers Road, Oakbrook Terrace, Illinois 60181 ("ASSIGNEE"), is desirous of obtaining the entire right, title and interest in and to the PATENTS AND PATENT APPLICATIONS subject to any licenses previously granted thereunder,

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable considerations paid by ASSIGNEE to ASSIGNOR, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE, its successors and assignees, the entire right, title and interest in and to the PATENTS AND PATENT APPLICATIONS, including the right to sue for past infringement thereof.

ASSIGNOR agrees for itself and its successors, legal representatives and assigns, without further compensation, to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the ASSIGNEE may reasonably request to effectuate fully this assignment.

IN TESTIMONY WHEREOF, ASSIGNOR has caused this Assignment to be executed by its duly authorized officer.

PLATINUM technology, inc.

By: Senior Vice-President and General Counsel	
Date 17-73-98	
ASSIGNEE hereby acknowledges receipt of the entire right, title and interest and to the PATENTS AND PATENT APPLICATIONS. PLATINUM technology IP. inc.	ir
By	
Date	

ACKNOWLEDGEMENTS

ASSIGNOR

State of 'LLINGE')		
County of DUPAGE.)		
On this <u>J3</u> day of <u>DECEMBER</u> , 1998, before me personally came Larry Freedman, Esq., to me known, who, being duly sworn, deposes and says that he is the Senior Vice President and General Counsel of PLATINUM technology, inc., the corporation described in, and which executed the foregoing instrument; that the seal affixed to said instrument is the seal of said corporation; that it was so affixed by order of the Board of Directors of said corporation; and he signed his name thereto by like order.		
OFFICIAL SEAL CHERYL D JUAREZ NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES:03/27/02 [Notary's Seal]		
ASSIGNEE		
State of ()) ss County of () () ()		
On this		
OFFICIAL SEAL CHERYL D JUAREZ Notary Public. STATE OF ILLINOIS MY COMMISSION EXPIRES: 03/27/02 [Notary's Seal]		

SCHEDULE A

SERIAL NO. FILED	TITLE
08/592,632 1/26/96	ROBUST MAPPING OF 2D CURSOR MOTION ONTO 3D LINES AND PLANES (U.S. Patent No. 5,798,761)
09/095,602 6/11/98	ROBUST MAPPING OF 2D CURSOR MOTION ONTO 3D LINES AND PLANES (continuation of U.S. Ser. No. 08/592,632) (abandoned)
08/640,003 4/30/96	INTERACTIVELY REDUCING POLYGON COUNT IN THREE-DIMENSIONAL GRAPHIC OBJECTS
08/748,613 1/27/99	INTERACTIVE AUTHORING OF 3D SCENES AND MOVIES
08/845,858 4/28/97	GENERATING MULTIMEDIA DOCUMENTS
08/901,069 7/28/97	PUBLISHING A HYPERMEDIA DOCUMENT
08/845,857 4/28/97	MANIPULATING GRAPHIC OBJECTS IN 3D SCENES
WO98/03345 4/28/98	MANIPULATING GRAPHIC OBJECTS IN 3D SCENES (PCT application claiming priority from U.S. Serial No. 08/845,857) (withdrawn)
08/903,440 7/30/97	TEXTURE MAPPING 3D GRAPHIC OBJECTS
08/654,297 5/28/96	NETWORK NAVIGATOR WITH ENHANCED NAVIGATIONAL ABILITIES (U.S. Patent No. 5,808,613)
08/716,543 9/19/96	SYSTEM AND METHOD FOR INCREASING THE PERFORMANCE FOR REAL-TIME RENDERING OF THREE-DIMENSIONAL POLYGONAL DATA
08/694,759 8/1/96	SYSTEM AND METHOD FOR OPTIMIZING A SCENE GRAPH FOR OPTIMIZING RENDERING PERFORMANCE

SCHEDULE A, cont'd

SERIAL NO.	FILED	TITLE
08/900,471	7/25/97	SYSTEM AND METHOD FOR INCREASING PERFORMANCE BY EFFICIENT USE OF LIMITED RESOURCES VIA INCREMENTAL FETCHING, LOADING AND UNLOADING OF DATA ASSETS OF THREE- DIMENSIONAL WORLDS BASED ON TRANSIENT ASSET PRIORITIES
08/841,397	4/30/97	SPATIALIZED AUDIO IN A THREE-DIMENSIONAL, COMPUTER-BASED SCENE

93808.W11